

AMENDMENTS TO THE CLAIMS:

The following listing of claims will replace all prior versions and listings of claims in the application.

Claims 1-32 were pending in the application. Claims 1-20 and 23-32 are maintained in their original form and Claims 21-22 are cancelled.

1. (Previously Presented) A modified acetylcholine receptor subunit comprising an α subunit of a vertebrate acetylcholine receptor having a region which is homologous with the amino acid sequence shown in SEQ ID NO: 1, wherein at least one amino acid in the region of the α subunit of the vertebrate acetylcholine receptor which is homologous with the amino acid sequence shown in SEQ ID NO: 1 is replaced by an amino acid which occurs at the identical position in the corresponding region of an α subunit of an insect acetylcholine receptor, and wherein the replacement of the at least one amino acid in the region of the α subunit results in a change of the amino acid sequence when compared with the amino acid sequence of the α subunit wherein no replacement has occurred.

2. (Previously Presented) A modified acetylcholine receptor subunit according to Claim 1, wherein at least four amino acids in the region of the α subunit of the vertebrate acetylcholine receptor which is homologous with the amino acid sequence shown in SEQ ID NO: 1 is replaced by the corresponding number of amino acids which occur at the identical positions in the corresponding region of an α subunit of an insect acetylcholine receptor.

3. (Previously Presented) A modified acetylcholine receptor subunit according to Claim 1, wherein at least seven amino acids in the region of the α subunit of the vertebrate acetylcholine receptor which is homologous with the amino acid sequence shown in SEQ ID NO: 1 is replaced by the corresponding number of amino acids which occur at the identical positions in the corresponding region of an α subunit of an insect acetylcholine receptor.

4. (Previously Presented) A modified acetylcholine receptor subunit according to Claim 1, wherein the entire region of the α subunit of the vertebrate acetylcholine receptor

which is homologous with the amino acid sequence shown in SEQ ID NO: 1 is replaced by the corresponding region of an α subunit of an insect acetylcholine receptor

5. (Previously Presented) A modified acetylcholine receptor subunit according to Claim 1, wherein the α subunit of a vertebrate acetylcholine receptor comprises mouse, rat, chicken, zebra fish, rhesus monkey, bovine or porcine neuronal subunits.

6. (Previously Presented) A modified acetylcholine receptor subunit according to Claim 1, wherein the α subunit of an insect acetylcholine receptor is the $\alpha 2$ subunit or the $\alpha 3$ subunit of *Myzus persicae*, or the $\alpha 1$ subunit of *Heliothis virescens* or *Manduca sexta*, or the $\alpha 1$, $\alpha 2$ or $\alpha 3$ subunit of *Drosophila melanogaster*.

7. (Previously Presented) A modified acetylcholine receptor subunit according to Claim 1, comprising the amino acid sequence shown in SEQ ID NO: 3.

8. (Previously Presented) A modified acetylcholine receptor comprising an acetylcholine receptor subunit according to Claim 1.

9. (Previously Presented) A modified acetylcholine receptor according to Claim 8, further comprising a mouse, rat, chicken, zebra fish, rhesus monkey, bovine or porcine β subunit.

10. (Previously Presented) A nucleic acid comprising a nucleotide sequence which codes for a modified acetylcholine receptor subunit according to Claim 1.

11. (Previously Presented) A nucleic acid according to Claim 10, wherein the nucleic acid comprises single-stranded or double-stranded DNA or RNA.

12. (Previously Presented) A nucleic acid according to Claim 11, wherein the nucleic acid comprises fragments of genomic DNA or cDNA.

13. (Previously Presented) A nucleic acid according to Claim 10, wherein the nucleotide sequence comprises the sequence shown in SEQ ID NO: 2.
14. (Previously Presented) A DNA construct comprising a nucleic acid according to Claim 10 and a heterologous promoter.
15. (Previously Presented) A vector comprising a nucleic acid according to any of Claim 10.
16. (Previously Presented) A vector according to Claim 15, wherein the nucleic acid is functionally linked to regulatory sequences which ensure expression of the nucleic acid in prokaryotic or eukaryotic cells.
17. (Previously Presented) A host cell containing a nucleic acid according to Claim 10.
18. (Previously Presented) A host cell according to Claim 17, wherein the host cell is a prokaryotic cell.
19. (Previously Presented) A host cell according to Claim 17, wherein the host cell is a eukaryotic cell.
20. (Previously Presented) A method for preparing a modified acetylcholine receptor subunit according to Claim 1, comprising the steps of :
- a) cultivating of a host cell containing a nucleic acid comprising a nucleotide sequence which codes for an acetylcholine receptor subunit according to Claim 1, in a culture medium and under conditions which ensure expression of the nucleic acid, and
 - b) isolating the polypeptide from the cell or the culture medium.

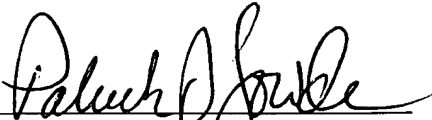
Claims 21-22 (cancelled).

23. (Previously Presented) A method for preparing a modified acetylcholine receptor subunit according to Claim 1, comprising the steps of
- a) expressing of a nucleic acid comprising a nucleotide sequence which codes for an acetylcholine receptor subunit according to Claim 1 in an in vitro system, and
 - c) isolating the polypeptide from the in vitro system.
24. (Previously Presented) A modified acetylcholine receptor comprising an acetylcholine receptor subunit of Claim 7.
25. (Previously Presented) A modified acetylcholine receptor subunit according to Claim 1, wherein the modified acetylcholine receptor subunit displays greater sensitivity to imidacloprid as compared to an unmodified acetylcholine receptor subunit.
26. (Previously Presented) A DNA construct comprising SEQ ID NO: 2 and a heterologous promoter.
27. (Previously Presented) A vector comprising a DNA construct according to Claim 26.
28. (Previously Presented) A vector according to Claim 27, wherein the nucleic acid is functionally linked to regulatory sequences which ensure expression of the nucleic acid in prokaryotic or eukaryotic cells.
29. (Previously Presented) A host cell containing a DNA construct according to Claim 26.
30. (Previously Presented) An isolated acetylcholine receptor comprising β subunit and an α subunit, wherein the α subunit comprises SEQ ID NO: 3.

31. (Currently Amended) An isolated acetylcholine recept[e]or comprising an α subunit and a β subunit, wherein the α subunit comprises a region having the same amino acid sequence as a region of an α subunit selected from the group consisting of:
the $\alpha 2$ subunit isolated from *Myzus persicae*,
the $\alpha 3$ subunit isolated from *Myzus persicae*,
 $\alpha 1$ subunit isolated from *Heliothis virescens*,
the $\alpha 1$ subunit isolated from *Manduca sexta*, and
the $\alpha 1$, $\alpha 2$ or $\alpha 3$ subunits isolated from *Drosophila melanogaster*.

32. (Currently Amended) An isolated acetylcholine recept[e]or according to Claim 31, wherein the β subunit is has the same amino acid sequence as a β subunit selected from the group consisting of:
the $\beta 2$ subunit isolated from mouse,
the $\beta 2$ subunit isolated from rat,
the $\beta 2$ subunit isolated from chicken,
the $\beta 2$ subunit isolated from dog,
the $\beta 2$ subunit isolated from zebra fish,
the $\beta 2$ subunit isolated from rhesus monkey,
the $\beta 2$ subunit isolated from bovine, and
the $\beta 2$ subunit isolated from porcine.

Respectfully submitted,

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